
The Perfect Storm of Literature Studies from International Students

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Abstract

"Special Topic – Current Development in IT" in GradDip caters for focussed study of topic of choice. We used it to capitalize on student's previous degree studies overseas (mostly India, most in IT). Students did the literature study during first semester of study. Assessment is done on presentation of the plan, final report, poster and presentation. We report experiences, insights and plans.

Keywords

Computing education, International students

Introduction

We assumed it should be easy for students considering their backgrounds! Total of 15 students of which 10 held IT degrees. Weekly classes, lead by tutor, took form of discussions of experiences. Also did individual consultation as required.

Course Prescription: The purpose of this module encourages the student to explore current developments in any area of the IT industry, investigating the theoretical foundations, the people who are driving the technology, and the impact on this type of technology.

Experience

A broad range of topics were chosen by students: Robotics, Artificial Intelligence, Data Warehousing, Cloud Computing, Call Centres, Nano technology, Biometrics, Multicore processors, Transport security and apparent particular interest in networking (Wireless, Security, Simulators, 3G, Privacy).

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Anecdotal evidence indicates students experienced the study process as overwhelming, demanding and frustrating (albeit rewarding). Our concern is that early negative experience could be detrimental to confidence, motivation and satisfaction, thus learning outcomes.

The usual issues of international students manifested: Language (in classroom communications and writing), "plagiarism" and frail study methods. "Instructional" classroom tutoring is also preferred to independent work.

We noticed typical weaknesses in the ability to do literature studies: Absence of clinical approach, depending on weak sources, obvious gaps in sources, difficulty in processing range of material, slow when working autonomously, little synthesis, evidently uncritical, tend towards technical details vs oversight.

Studying current developments with its impact is complicated by the fact that solid/proven literature typically used for degree study students (NQF L7) appears to be not readily available. Also, sound/credible literature appears narrow focussed, less in public domain and written in complex style. All of these significantly increase the demands place on international students.

Other concerns about student skills include ICT use (for report writing and presentation), doing large pieces of work, genuine understanding/insight and student need for frequent individualized constructive feedback (but that requires significant extra time from the tutor).

Prior qualification played an unexpected role: Students with prior/overseas IT degrees were strong with technical details this saving time with reading. However, non-IT degree students more readily presented readable oversight, generalization and implication.

Final products were at required level (NQF L7) and sufficient quality to pass but it seems a messy road!

Learning and Conclusion

Noted/concluded:

- a) In effect, students are doing part of a "mini-dissertation", namely the literature study.
- b) Similarity to IT degree capstone project, eg. being "ambiguous and complex" (Chard, 2009)
- c) Issues re being international student, become more intense for all parties involved.
- d) Weak student skills re ICT (PC use etc), language and work methods becomes more exposed.
- e) The current approach does not exploit the possibilities of students holding extensive IT training.

The future

All is not lost. Kourie (2001) humorously but also seriously proposed that "best practice teaching" actually *deprives the student of the benefits of self-discovery, intellectual ownership and responsibility!* Still, planned and controlled "anarchy" is perhaps advisable, so we are considering to at least -

- a) Continue special support of international students
- b) Explore NACCQ literature on Capstone projects
- c) Explore *principles* of mentoring for mini-dissertations
- d) Explore integrating student skills building into course
- e) Explore literature on self-directed study
- f) Explore doing ICT project in NZ environment

References

- Chard, S. Et al. (2009). ICT Capstone projects: 'the edge of chaos'. Proceedings of the 22nd Annual Conference of NACCQ 2009, Auckland, New Zealand.
- Kourie, D.G. (2001) *On the benefits of bad teaching*. Proceedings of South African Computer Lecturers Association., Pretoria, 2001. Accessed 15 Aug 2009 at <http://www.cs.up.ac.za/cs/dkourie/Articles/The%20Benefits%20of%20Bad%20Teaching.pdf>